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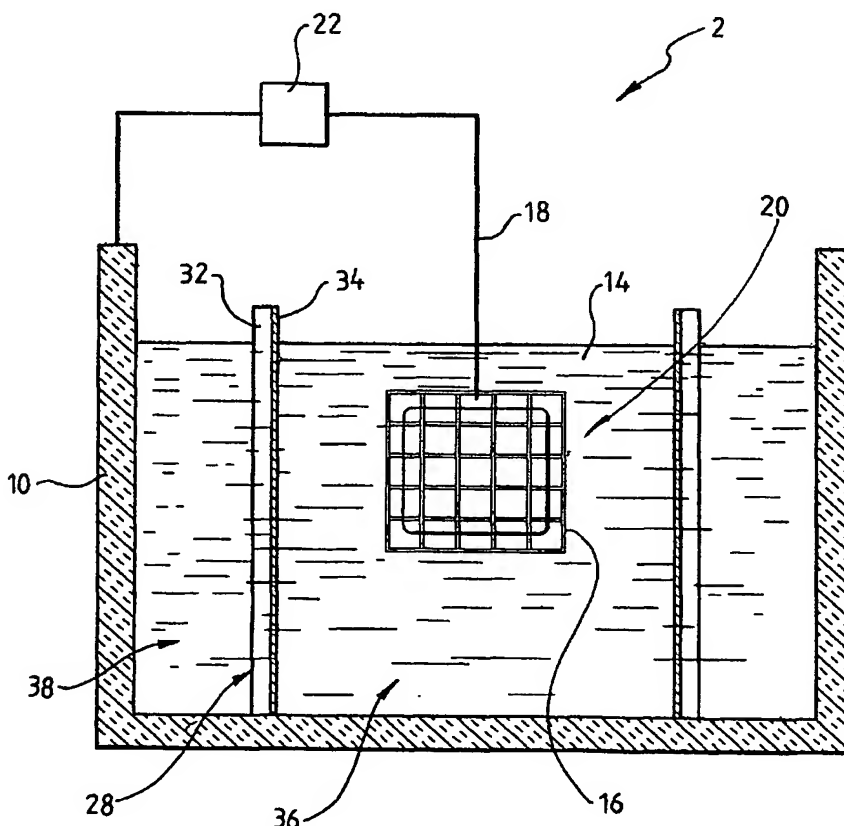
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(54) Title: MINIMISING CARBON TRANSFER IN AN ELECTROLYTIC CELL



(57) **Abstract:** An electrochemical cell for electrochemical reduction of a metal oxide in a solid state is disclosed. The cell includes a molten electrolyte (14), an anode (18) formed from carbon in contact with the electrolyte, a cathode (20) formed at least in part from the metal oxide in contact with the electrolyte, and a membrane (28) that is permeable to oxygen anions and is impermeable to carbon in ionic and non-ionic forms positioned between the cathode and the anode to thereby prevent migration of carbon from the anode to the cathode. The membrane includes a body (32) and a lining (34) on the surface of the body on the cathode side of the membrane. The lining is formed from a material that is inert with respect to dissolved metal in the electrolyte and is impermeable to the dissolved metal. An electrochemical method based on the cell is also disclosed.



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